DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024151 Address: 333 Burma Road **Date Inspected:** 28-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Zhu Zhong Hai No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

Segment 13AW

This QA Inspector performed Ultrasonic Testing (UT) Verification inspection of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations verified are as follows.

SEG3013R-221, 159, 170, 184

SEG3013S-005

SEG3013R-001, 003

SEG3013Q-030

SEG3013N-001

Nondestructive testing (NDT) notification No. 09283

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

WELDING:

Segment 13AE ~ 13BE

This QA Inspector observed ZPMC qualified welding personnel identified as 043661 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE13AD-005; located On Orthotropic Box Girder (OBG) Edge Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-3G (3F) FCM-Repair-1. See attached photo for further details.

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 066479 perform Shielded Metal Arc Welding (SMAW), weld joint identified as EP3024-001-005; located On Orthotropic Box Girder (OBG) EP3024A to RS3403B Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Shen Jian Bo was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2114-FCM-1. See attached photo for further details.

Segment 13AE

This QA Inspector observed ZPMC qualified welding personnel identified as 054467 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3007B-158; located On Orthotropic Box Girder (OBG) FL3 Side Plate to Deck Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

Segment 14 West

This QA Inspector observed ZPMC qualified welding personnel identified as 068596 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020AG-001; located On Orthotropic Box Girder (OBG) Edge Plate to Deck Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhu Yuan Yuan. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhu Yuan Yuan was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-TC-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)





Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey - 15000026784, who represents the Office of Structural Materials for your project.

| Inspected By: | Prabhune, Manoj | Quality Assurance Inspector |
|----------------------|-----------------|-----------------------------|
| Reviewed By: | Peterson,Art | QA Reviewer |